

6.4.3 Triangle Inequality Theorem Practice

1. If two sides of a triangle are 1 and 3, the third side may be
(1) 5 (2) 2 (3) 3 (4) 4

2. If the lengths of two sides of a triangle are 5 and 7, the length of the third side may **not** be
(1) 12 (2) 7 (3) 3 (4) 5

3. Which set of numbers may represent the lengths of the sides of a triangle?
(1) {2,5,9} (2) {6,6,7} (3) {6,4,2} (4) {7,8,1}

4. If the lengths of two sides of a triangle are 4 and 10, which could be the length of the third side?
(1) 6 (2) 8 (3) 14 (4) 16

5. If the lengths of two sides of a triangle measure 7 and 12, the length of the third side could measure
(1) 16 (2) 19 (3) 3 (4) 5